

EV-2 Amendment to Sources Sought Special Notice

This is an amendment to the Sources Sought Special Notice 2011 NNA1112345L-SN2011 to seek partners specifically interested in developing competitive proposals in response to NASA's Earth Venture – 2 (EV-2) Announcement of Opportunity (AO), which is currently a DRAFT solicitation. The website for this DRAFT AO is at <http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={EF2EDAC6-FDD5-B1F7-1C5E-ACD03EACA010}&path=init>

Responses to this Sources Sought amendment are due by 5:00 pm Pacific Time, May 12, 2011 and shall be submitted by email only to diane.alexander-1@nasa.gov. Please include EV-2 SN2011 in the subject line of the email. Responses shall: 1) Not exceed 15 pages total; shorter responses are encouraged; 2) Use an Arial font text with a size not smaller than 12 point; 3) Address all requirements listed; and 4) Provide a Point of Contact to address questions from NASA.

Participation in this partnering opportunity is open to all categories of U.S. and non-U.S. organizations, including educational institutions, industry, not-for-profit institutions, the Jet Propulsion Laboratory, as well as NASA Centers and other U.S. Government Agencies. Historically Black Colleges and Universities (HBCUs), Other Minority Universities (OMUs), small disadvantaged businesses (SDBs), veteran-owned small businesses, service disabled veteran-owned small businesses, HUBzone small businesses, and women-owned small businesses (WOSBs) are encouraged to apply. Participation by non-U.S. organizations is welcome but subject to NASA's policy of no exchange of funds, in which each government supports its own national participants and associated costs.

Responses may be submitted for any of the technical areas described below. Partners are sought with expertise in any one individual area below or combination of the spacecraft and one instrument concept. A spacecraft bus does not have to accommodate both instrument concepts to be of interest. For example, a response could include a spacecraft bus, a spacecraft bus plus concept 1 and/or a spacecraft bus plus concept 2.

Spacecraft:

- Sun Synchronous Orbit 400-700km
- Delta-V ~40 to 100m/s CBE
- Payload Accommodations (only one instrument concept is sought per spacecraft bus)
 - Concept 1
 - Mass: ~50kg CBE , ~65 kg MEV
 - Power: ~50W Ave, 10W Standby CBE
 - Volume accommodation: 80 cm (height, boresight direction) x 50 cm x 60 cm
 - Concept 2
 - Mass: ~25kg CBE ~32.5 kg MEV

- Power: ~130W Average CBE, ~0W Standby CBE
- Volume accommodation: 45 cm (height, boresight direction) x 36 cm x 45 cm
- Minimum two year operational life
- Category 3 mission (per NPR 7120.5D NID) with Class D payloads (per NPR 8705.4)
- 3 axis stabilized, NADIR pointing
- Data storage needed by payload: 32 Gbits
- X-band downlink >10 Mbps higher preferred (>100 Mbps)
- Development schedule:
 - ATP to Payload AI&T <24 months
 - ATP to launch <30 months

Concept 1 Instrument:

- Class D payload (per NPR 8705.4)
- Detection limit: $1\text{E-}8$ to $1\text{E-}6$ Watts/cm².sr.micron with SNR > 10
- Sensitivity range: $1\text{E-}8$ or $1\text{E-}6$ to $10\text{E-}2$ Watts/cm².sr.micron with SNR > 10
- Ground sampling distance ~50m
- Swath width: 180 to 260km
- Detection band range:
 - Visible 400 to 1200 nm narrower is acceptable
 - Desired Thermal Infra-Red 10 to 12 micron
- Duty cycle 15-20%

Concept 2 Instrument

- Class D payload (per NPR 8705.4)
- Detection band:
 - Green (525-600nm)
 - Red (630-680nm)
 - NIR (845-885nm) and
 - SWIR (1560-1660nm)
- Ground sample distance ~15 to 30m
- Swath: 300 to 600km
- Radiometry <15% error in at-sensor radiance
- Duty cycle 15-20%

Responses to this amendment may also be considered for evaluation with regard to other opportunities announced in this synopsis or its updates, if responders so indicate. Similarly, organizations that submitted responses previously to this Sources Sought Special Notice 2011 may request that their response be re-evaluated for this EV-2 opportunity. In that case, please email diane.alexander-1@nasa.gov by the due date

above and indicate when the response was submitted previously and to what email address.

This ARC partnering opportunity does not guarantee selection for award of any contracts or other agreements, nor is it to be construed as a commitment by NASA to pay for the information solicited. The proposal partner(s) selected will provide the necessary resources to support proposal development, at no cost to NASA, including technical requirements, conceptual designs, technical data, proposal input, project schedules, and cost estimates by the required due dates. Final proposal inputs will be due to ARC prior to the due date stated in the AO. Inability to adequately support proposal development will result in the partner being dropped from the proposal. If the proposal is subsequently selected by NASA HQ, ARC anticipates issuing contracts or other agreements to the selected partner(s) for performance of the proposed tasks.

ARC will evaluate responses to this amendment in accordance with the criteria in the Sources Sought Special Notice 2011 NNA1112345L-SN2011. ARC may contact organizations that respond to this amendment for clarification or further information.

Questions regarding this amendment may be directed to Rachel.Khattab@nasa.gov.